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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
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Lat 39.091946 Lon -120.731773

REPLY TO: 5220 Forest Disease Detection (2470)

May 10, 1971

SUBJECT: Examination of Seed Tree Orchards

TO: Forest Supervisors, Eldorado and Tahoe N.Fs.

On April 14, Dave Graham, Mike Srago, Gaylord Parks and Dwaine Nebeker examined the Badger Hill Seed Tree Orchard, Placerville Ranger District, Eldorado National Forest.

Six dead sugar pine grafts were found. One of these, near the entrance to the orchard, exhibited symptoms of infection by Fomes annosus and Armillaria mellea. No positive field evidence of root disease was found associated with the other dead pines. Several specimens were collected for culturing in the laboratory.

The Douglas-fir orchard was also examined and 12 dead trees were found. Four of these were examined closely and all had severe root rot caused by Armillaria mellea.

The following day, Dave Graham, Mike Srago, Dwaine Nebeker and Joe Oden examined the Foresthill Seed Orchard, Foresthill Ranger District, Tahoe National Forest. When the land for this orchard was cleared, most of the stumps were left in place. A large number of the oak stumps were examined and found to be infected with Armillaria mellea.

Although no dead or dying trees were found within the orchard, three planted Douglas-fir were found killed by A. mellea just outside the orchard fence.

RECOMMENDATIONS

A. Badger Hill Seed Tree Orchard

Before replanting in spots where the previous root stock was infected by A. mellea, the spot should be fumigated with methyl bromide.

Procedure:

1. The soil on the planting site should be allowed to dry out.

2. Bury one 1-pound can of frozen methyl bromide four feet deep in the center of the area in which the new root stock is to be planted. Puncture the can and then cover immediately with soil.

3. Wait a minimum of 14 days before planting the area.

B. Foresthill Seed Orchard

Remove all oak stumps down to 2" diameter roots. In order to minimize the amount of root stock damage this work should be accomplished this year. This will also allow maximum time for replacing damaged root stock prior to grafting.

C. All Future Seed Orchards

Either select area without any type of oaks or remove all oak stumps prior to planting.

If you plan to carry out any of these recommendations, please submit specific proposals and finance needs as soon as possible. The use of methyl bromide will require review and prior approval by the Pesticide-Use Coordinating Committee.

R. E. Worthington, for

R. E. WORTHINGTON
Chief, Division of Timber Management

xcc: Eldorado & Tahoe